## \$java PastryMain 100 1000 100 10 142857

```
Number of Nodes - Lower Bound: 100
Number of Nodes - Upper Bound: 1000
Increment: 100
Number of trials: 10
For b = 1
N
       Н
100
                    2.6
                          2.1
                                                                  1.0
      2.0
             3.2
                                 1.8
                                        1.3
                                              1.3
                                                     1.1
                                                            1.0
       Mean = 1.74, Expected = 6.64, Standard Deviation = 0.74
200
             3.0 2.7
                          3.1
                                 2.7
                                        3.0
                                              2.7
                                                     1.6
                                                            1.8
                                                                  1.6
       Mean = 2.53, Expected = 7.64, Standard Deviation = 0.62
                   3.8
300
                          3.0
                                 2.7
                                              2.9
                                                     2.9
                                                            2.5
                                                                  2.2
      3.3
             4.0
                                        3.2
       Mean = 3.05, Expected = 8.23, Standard Deviation = 0.55
400
                    3.9
                          3.0
                                 3.6
                                       4.6
                                              3.1
             4.4
                                                     3.0
                                                            3.1
                                                                  2.8
       Mean = 3.56, Expected = 8.64, Standard Deviation = 0.65
500
      4.3
             4.4
                   4.0
                          4.6
                                 4.2
                                        3.7
                                              3.3
                                                     4.0
                                                            3.2
                                                                  3.6
       Mean = 3.93, Expected = 8.97, Standard Deviation = 0.47
600
             4.0
                  4.4
                          4.0
                                 4.1
                                        3.8
                                              4.2
                                                     3.7
                                                                  3.8
       Mean = 4.10, Expected = 9.23, Standard Deviation = 0.31
700
                  4.2
                          3.1
                                4.3
                                                                  3.4
             4.3
                                       4.1
                                              4.2
                                                     3.8
       Mean = 3.89, Expected = 9.45, Standard Deviation = 0.41
800
             4.9
                   4.2
                          4.0
                                 4.7
                                       3.8
                                              3.6
                                                     4.1
                                                            3.7
       Mean = 4.05, Expected = 9.64, Standard Deviation = 0.46
900
      5.3
             3.7
                   3.7
                          4.6
                                4.8
                                       4.5
                                              5.3
                                                     4.2
                                                           4.5
                                                                  3.6
       Mean = 4.42, Expected = 9.81, Standard Deviation = 0.62
1000
             3.8 3.7
                          4.9
                                 3.9
                                       5.1
                                              4.7
                                                     5.2
                                                           3.5
                                                                  3.9
       Mean = 4.31, Expected = 9.97, Standard Deviation = 0.63
chi^2
      = 1140.31788
p-value = 0.00000
For b = 2
N
       Н
100
      2.4
             2.7
                    2.3
                          1.8
                                 1.9
                                        1.6
                                              1.3
                                                     1.2
                                                            1.0
                                                                  1.0
       Mean = 1.72, Expected = 3.32, Standard Deviation = 0.61
200
                                 2.4
             2.7 2.7
                          2.3
                                        2.9
                                              1.6
                                                     2.4
                                                            1.8
                                                                  1.5
       Mean = 2.31, Expected = 3.82, Standard Deviation = 0.51
300
                    2.8
                          2.8
                                 2.9
                                        2.3
                                              2.6
                                                     3.0
             3.1
                                                           2.5
                                                                  2.2
       Mean = 2.72, Expected = 4.11, Standard Deviation = 0.31
                          2.9
400
             3.7
                    3.5
                                 2.5
                                        2.8
                                              3.0
                                                     3.2
                                                                  2.8
       Mean = 3.06, Expected = 4.32, Standard Deviation = 0.35
500
             3.3
                    3.1
                          3.6
                                 3.4
                                        3.6
                                              3.3
                                                     3.8
                                                            3.1
                                                                  2.8
       Mean = 3.29, Expected = 4.48, Standard Deviation = 0.32
600
             4.1
                   3.1
                          3.6
                                 4.2
                                        3.5
                                              3.2
                                                     3.3
                                                                  2.7
       Mean = 3.42, Expected = 4.61, Standard Deviation = 0.47
700
             2.9 3.4
                          3.4
                                 3.5
                                       3.6
                                              3.6
                                                     3.0
                                                                  3.4
       Mean = 3.28, Expected = 4.73, Standard Deviation = 0.28
800
             3.8
                   3.3
                          3.4
                                 3.1
                                       3.5
                                              3.7
                                                     4.0
                                                           3.2
                                                                  3.1
       Mean = 3.47, Expected = 4.82, Standard Deviation = 0.31
900
      4.1
             4.4
                    3.6
                          3.6
                                4.2
                                        2.5
                                              4.0
                                                     3.8
                                                           3.9
                                                                  3.8
       Mean = 3.79, Expected = 4.91, Standard Deviation = 0.52
```

```
1000 3.9 4.1 3.6 3.0 3.8 3.5 3.3 3.8 3.8
      Mean = 3.67, Expected = 4.98, Standard Deviation = 0.33
chi^2 = 136.89648
p-value = 1.00000
For b = 3
      Н
100
     2.1
           2.2 2.1 1.7 1.6
                                 1.8 1.4 1.3
      Mean = 1.64, Expected = 2.21, Standard Deviation = 0.41
200
           2.5 2.5
                      1.7 2.0 2.0
                                        1.9
                                              1.8
                                                    2.3
                                                          1.7
     Mean = 2.09, Expected = 2.55, Standard Deviation = 0.33
300
                      2.6
                            2.2 2.1
                                        1.8
           2.7 2.8
                                                          2.1
      Mean = 2.39, Expected = 2.74, Standard Deviation = 0.37
400
           2.9 2.9
                      2.7 3.1 2.7 2.9
                                             2.5
                                                   2.6
                                                          2.4
      Mean = 2.73, Expected = 2.88, Standard Deviation = 0.22
500
           2.7 2.4
                      3.1
                           2.5 2.6
                                       3.1
                                              2.6
      Mean = 2.73, Expected = 2.99, Standard Deviation = 0.24
           3.2
                           2.6
                                 2.3 3.0
                                              2.4
600
               2.6
                     2.9
                                                    2.3
      Mean = 2.70, Expected = 3.08, Standard Deviation = 0.32
700
           3.1 2.4
                     2.7 2.9 2.7
                                       3.1
                                              3.2
                                                          3.2
      Mean = 2.85, Expected = 3.15, Standard Deviation = 0.29
           2.9 2.5 3.2 2.9 3.1
                                      2.5
800
                                              3.4
                                                          3.0
      Mean = 2.97, Expected = 3.21, Standard Deviation = 0.30
                                       3.0
900
     2.9 3.2 3.4 2.8 3.2 3.2
                                              2.8
                                                          3.0
      Mean = 3.03, Expected = 3.27, Standard Deviation = 0.21
1000
     3.0 3.0 3.1 3.0 2.7 3.5
                                        2.8
                                              2.5
                                                          2.8
      Mean = 2.91, Expected = 3.32, Standard Deviation = 0.28
chi^2 = 13.06000
p-value = 1.00000
For b = 4
Ν
      Н
100
           1.7 1.8 1.7 2.1
                                 1.4 1.4 1.6 1.3
      Mean = 1.62, Expected = 1.66, Standard Deviation = 0.33
200
           2.4 1.9
                       2.2
                             2.2
                                 1.9
                                        1.8
                                              1.8
                                                          1.8
      Mean = 1.99, Expected = 1.91, Standard Deviation = 0.24
300
           2.0 2.3 2.1 1.8 2.0
                                        2.1
                                              2.0
      Mean = 2.10, Expected = 2.06, Standard Deviation = 0.17
400
           2.5 2.0 2.3 2.3
                                 1.8 2.2 1.6
      Mean = 2.19, Expected = 2.16, Standard Deviation = 0.31
                           2.4
500
           2.6 2.3
                      2.8
                                 2.3
                                        2.0
                                             2.4
                                                          2.0
      Mean = 2.34, Expected = 2.24, Standard Deviation = 0.26
           2.8 3.0 2.4 2.4 2.9
                                        2.5
                                              2.2
600
                                                    2.2
      Mean = 2.55, Expected = 2.31, Standard Deviation = 0.28
700
               2.6
                      2.6 2.6 3.0
                                        2.7
                                              2.6
           2.7
                                                   2.7
                                                          2.8
      Mean = 2.71, Expected = 2.36, Standard Deviation = 0.13
800
           3.1 2.6
                      2.4
                           3.1 2.5
                                        2.6
                                              3.0
                                                          2.6
      Mean = 2.70, Expected = 2.41, Standard Deviation = 0.26
900
                     2.8
                            2.7 2.5
           2.7 2.5
                                       2.4
                                             2.8
                                                   2.5
                                                          2.6
      Mean = 2.62, Expected = 2.45, Standard Deviation = 0.14
     2.7 2.4 3.1
                       2.6
                             2.5 2.6
                                       2.8
                                              2.7
1000
                                                          2.6
```

Mean = 2.69, Expected = 2.49, Standard Deviation = 0.20

chi^2 = 11.99161 p-value = 1.00000